

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	PLICATION NO. FILING DATE FIRST NAM		ATTORNEY DOCKET NO.	CONFIRMATION NO
10/049,821	02/19/2002	Yasuyuki Suzuki	2002-0206A	2849
513	7590 07/27/2006		EXAMINER	
WENDERO 2033 K STRE	TH, LIND & PONAC	PRYOR, ALTON NATHANIEL		
SUITE 800		ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20006-1021			1616	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s	Applicant(s)				
Office Action Summary			10/049,821	SUZUKI ET	SUZUKI ET AL.				
			Examiner	Art Unit					
			Alton N. Pryor	1616					
Period fo	The MAILING DATE of this commun r Reply	nication appe	ears on the cover shee	t with the corresponden	ce address				
A SHO WHIC - Exten after: - If NO - Failur Any n	ORTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE M sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comr period for reply is specified above, the maximum st te to reply within the set or extended period for reply peply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DA's of 37 CFR 1.136 munication. tatutory period will, by statute, or	TE OF THIS COMMU 6(a). In no event, however, ma I apply and will expire SIX (6) It cause the application to becom	NICATION. y a reply be timely filed MONTHS from the mailing date of a BANDONED (35 U.S.C. § 13	of this communication.				
Status									
1)	Responsive to communication(s) file	ed on <i>09 Ma</i>	y 2006.						
′=	, ,		action is non-final.						
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
•	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)□	4) ☐ Claim(s) <u>7,20,21,33,39,40,42,43,47-49</u> is/are pending in the application.								
,	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)[5) Claim(s) 7,20,21,33,43 and 47 is/are allowed.								
6)[
7)	Claim(s) is/are objected to.				•				
8)[Claim(s) are subject to restrict	ction and/or	election requirement.						
Application	on Papers								
9) 🗆 -	The specification is objected to by th	e Examiner.							
-	The drawing(s) filed on is/are:			to by the Examiner.					
	Applicant may not request that any obje	ction to the di	rawing(s) be held in abe	yance. See 37 CFR 1.85	(a).				
	Replacement drawing sheet(s) including	the correction	n is required if the draw	ing(s) is objected to. See	37 CFR 1.121(d).				
11) 🔲 -	The oath or declaration is objected to	by the Exa	miner. Note the attac	ned Office Action or for	m PTO-152.				
Priority u	nder 35 U.S.C. § 119								
-	Acknowledgment is made of a claim ☐ All b)☐ Some * c)☐ None of:	for foreign p	priority under 35 U.S.C	C. § 119(a)-(d) or (f).					
· ·	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies	of the priorit	y documents have be	en received in this Nat	ional Stage				
	application from the Internatio	nal Bureau	(PCT Rule 17.2(a)).						
* S	ee the attached detailed Office actio	n for a list of	f the certified copies r	ot received.					
Attachment	•								
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P	PTO-048\		w Summary (PTO-413) lo(s)/Mail Date					
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date			of Informal Patent Application	n (PTO-152)				

Application/Control Number: 10/049,821 Page 2

Art Unit: 1616

DETAILED ACTION

I. Rejection of claims 21,33,39,40,42-46 under 35 USC 112, 1st paragraph with respect to broadness of the melatonin receptor agonists will not be maintained in light of amendment filed 5/9/06. The invention's compounds have been narrowed to structurally related compounds.

II. New Rejection:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 39,40,42,48,49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For rejections under 35 U.S.C. 112, first paragraph, the following factors must be considered (In re Wands, 8 USPQ2d 1400, 1404 (CAFC, 1988)):

- 1) Nature of invention.
- 2) State of prior art.
- 3) Quantity of experimentation needed to make or use the invention based on the content of the disclosure
 - 4) Level of predictability in the art.
 - 5) Amount of direction and guidance provided by the inventor.
 - 6) Existence of working examples.

Application/Control Number: 10/049,821 Page 3

Art Unit: 1616

7) Breadth of claims.

8) Level of ordinary skill in the art.

See below:

1) Nature of the invention.

The nature of the invention is to a method of administering a melatonin receptor agonist to a subject for the treatment of a melatonin related disease.

2) State of the prior art and the predictability or lack thereof in the art.

The state of the prior art is that it involves screening *in vitro* and *in vivo* to determine which melatonin diseases can be treated by instant melatonin receptor agonists. There is no absolute predictability even in view of the seemingly high level of skill in the art. The existence of these obstacles establishes that the contemporary knowledge in the art would prevent one of ordinary skill in the art from accepting any therapeutic regimen on its face. The instant claimed invention is highly unpredictable as discussed below:

It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. *In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statue. Further, their mode of action is often unknown or very unpredictable and administration of the drugs can be accompanied by undesirable side effects.

Thus, in the absence of a showing of correlation between all melatonin related diseases claimed as capable of being treated by compounds of the instant claims, one

Art Unit: 1616

of ordinary skill in the art is unable to fully predict possible results from the administration of the compounds due to the unpredictability of the role of the huge number of melatonin related diseases set forth in the claims.

3) Quantity of experimentation needed to make or use the invention based on the content of the disclosure.

The quantity of experimentation needed is undue experimentation. One of ordinary skill in the art would first need to determine the types of diseases to be treated, and then determine which compounds would be suitable for said treatment and/or prevention those types of melatonin related diseases.

5) Amount of direction and guidance provided by the inventor.

The amount of direction or guidance present is found on pages 81-93 wherein plaster and patch compositions are exhibited. However, data related to the treatment of a melatonin related disease with the plaster or patch is not provided.

6) Existence of working examples.

There is provided no working examples for treating melatonin related disease with melatonin receptor agonists.

7) Breadth of claims.

Claims are extremely broad due to the vast number of possible melatonin related diseases encompassed by the instant invention.

8) Level of ordinary skill in the art.

The level of ordinary skill in the art is high. Due to the unpredictability in the pharmaceutical art, it is noted that each embodiment of the invention is required to be individually assessed for physiological activity by *in vitro* and *in vivo* screening to determine which compounds exhibit the desired pharmacological activity and which diseases would benefit from this activity.

Application/Control Number: 10/049,821

Art Unit: 1616

Hence, the specification fails to provide sufficient support of the use of the compounds of the claims for the treatment of any disease. As a result necessitating one of ordinary skill in the art to perform an exhaustive search to determine which diseases can be treated by which compounds of the instant claims in order to practice the claimed invention.

Genentec Inc. V. Novo Nordisk A/S (CAFC) 42 USPQ 2D 1001, states that:

"a patent is not a hunting license. It is not a reward for search, but compensation for its successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the Wands factors, and *In re Fisher* (CCPA 1970) discussed above, to practice the claimed invention herein, a person of ordinary skill in the art would have to engage in undue experimentation to test which diseases can be treated by the compounds encompassed in instant claims, with no assurance of success.

Claims 39,40,42,48,49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a written description rejection.

To satisfy the written description requirement, applicant must convey with reasonable clarity to one skilled in the art, as of the filing date that application was in

Application/Control Number: 10/049,821

Art Unit: 1616

possession of the claimed invention. The specification does not provide melatonin related diseases.

Claims reciting melatonin related diseases are neither described nor exemplified and the specification does not inform the public of the limits of the monopoly asserted.

To satisfy the written description requirement, applicant must convey with reasonable clarity to one skilled in the art, as of the filing date that application was in possession of the claimed invention. There is no description in the specification for melatonin related diseases recited in claims 39,40,42,48,49.

Allowable Subject Matter

Claims 7,20,21,33,43,47 are allowable. The prior art does not teach or suggest a preparation comprising instant melatonin receptor agonists plus lauric diethanolamide.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/049,821 Page 7

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alton Pryor

Primary Examiner

AU 1616